



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,121	12/17/2001	Sergiy Victorovich Vasylyev		5045
25945	7590	08/18/2004		
SERGIY V. VASYLYEV 10027 EAST TARON DR. ELK GROVE, CA 95758			EXAMINER	ROBINSON, MARK A
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/026,121	VASLYEV ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	P
	Mark A. Robinson	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

#### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 04 June 2004.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 19-28 and 30-38 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 19-28 and 30-38 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION*****Claim Objections***

1. Claim 26 is objected to because the language used makes it unclear if the planar reflectors are a part of or in addition to the reflective surfaces set forth in independent claim 19. In order to correspond to the teachings of the specification, the examiner suggests as a guideline the following language for claim 26: "wherein at least one of the elongated reflective surfaces comprises a composite of elongated planar reflectors extending parallel to said reflective surfaces and having the same basic orientation thereby forming said generally concave transversal profile." Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 19-25, 27, 28, 30-32 and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by York 4347834.

Art Unit: 2872

These claims stand rejected as discussed in the previous office action. Note that York's beams may be said to converge in "preselected" directions due to the design angles of the reflectors.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 19-28 and 30-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Popovich 4337759 in view of York.

Claims 19-28 and 30-36 stand rejected as discussed previously. Regarding claim 26, although not shown by Popovich in view of York, composite curved reflective surfaces made of individual planar elements are well known in the art. It would have been obvious to form the reflective elements of Popovich in view of York in this manner in order to provide a simply manufactured curved reflector profile.

Regarding claims 37 and 38, Popovich in view of York shows two arrays of reflectors, but does not teach means for supporting the reflectors such that they are individually adjusted or moved (whether by themselves or as part of an array). However, means for individually supporting reflectors in this manner is well known in the art, and modifying the reflectors of Popovich in view of York accordingly would have been obvious at the time of invention to provide increased flexibility/adjustability in positioning of the reflectors.

6. Claims 26 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over York.

Use of reflectors having a circular profile or a composite curved profile consisting of planar segments would have been obvious at the time of invention since these types of surfaces are easier to manufacture versus non-spherical curved surfaces.

***Response to Arguments***

7. Applicant's arguments have been fully considered but they are not persuasive.

Art Unit: 2872

Applicant has argued that York does not show elongated reflectors with longitudinal ends. However, it should be noted that "elongated" does not mean "linear" or "straight." The reflectors of York may be considered as being "elongated" relative to a short(er) reflector. Further, applicant has argued that York does not achieve a linear focus with his reflectors. However, this argument is irrelevant since this limitation is not found in the claims.

Applicant has argued that Popovich's refractive structure exhibits dispersion and light loss due to multiple reflections at the interfaces. However, the limitations of the claims are met since Popovich in view of York includes the claimed reflector structure, regardless of any other properties exhibited or additional structure included by the references. The fact that there may be dispersion or light loss in Popovich's device does not preclude use of the reference against applicant's claims as long as the claimed subject matter is met by the reference(s).

Applicant has argued that Popovich's reflectors are not concave. However, curved reflectors are shown by the secondary reference to York.

Art Unit: 2872

Applicant has argued that the present invention allows higher bend angles relative to the prior art devices. However, these features are not present in the claims.

Applicant has argued that convergent beams are not shown by the prior art. However, convergent beams are clearly shown by both Popovich (fig. 1) and York (fig. 2).

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2872

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Robinson whose telephone number is (571) 272-2319.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn, can be reached at (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MR

8/12/04

  
MARK A. ROBINSON  
PRIMARY EXAMINER